



Intermountain Forensics

SOP #

ORG-211

Revision #

02

Forensic DNA Technical Leader Approval

Issue Date

01/19/2024

Position Summary- Genetic Genealogy Technician

1. Purpose

To describe the roles and responsibilities of the position of the Genetic Genealogy Technician within the organization and provide the minimum education, experience, certification, knowledge, skills, and abilities required for the position.

2. Summary

The Genetic Genealogy Technician position performs the processing of laboratory samples to create the sample libraries and library pools required for analysis by sequencing. The position is responsible for evidence intake and chain of custody as well as documentation pertinent to sample processing.

3. Procedure

Minimum Educational Requirements

1. Bachelor's degree in a natural, physical, or forensic science
2. Laboratory experience may be substituted for a degree provided it has relevance to Forensic laboratory work such as:
 - a. Laboratory experience with DNA sequencing and/or fragment assay
 - i. Next Generation Sequencing preferred
 - b. Laboratory experience with traditional forensic DNA processes
 - i. RT-PCR assays
 - ii. DNA extraction assays
 - iii. Reagent preparation and or aliquoting using manual pipetting techniques

Preferred Experience and Education Requirements

3. Three years of Forensic DNA laboratory experience
 - a. Obtained at a laboratory where DNA testing was conducted for the identification and evaluation of biological evidence in criminal matters
 - b. A master's degree or PhD in a natural, physical, or forensic science may be substituted for experience, provided it contained sufficient coursework to introduce the laboratory skills necessary to perform the laboratory work associated with roles and responsibilities of this position

Mandatory Roles and Responsibilities

1. Evidence intake and evidence release
2. Preparation of libraries and library pools per standard operation procedure
3. Maintenance of instruments
4. Courtroom testimony
5. General Knowledge of PCR, NGS library preparation, and sequencing
6. Reagent preparation, documentation, and storage
7. Knowledge and ability in all authorized laboratory testing protocols
8. Participates in the IMF proficiency testing program.
9. Participates in implementing and maintaining the quality assurance and quality control program, as well as laboratory safety, to ensure the integrity of analytical testing and results.



Intermountain Forensics

| | |
|------------|---------|
| SOP # | ORG-211 |
| Revision # | 02 |

| | |
|---|------------|
| Forensic DNA Technical Leader Approval | Issue Date |
|  | 01/19/2024 |

4. References

1. Federal Bureau of Investigation, "Quality Assurance Standards for Forensic DNA Testing Laboratories"
2. ISO/IEC 17025:2017 – Forensic Science Testing and Calibration Laboratories

5. Definitions

N/A